

FACT SHEET

Water Quality Series, No. 3 of 3, Rev. 0

January 2003

Storm Water Management

Pollutants in storm water have a significant impact on water quality in the U.S. In response to the need for comprehensive requirements to control the discharge of pollutants in storm water, Congress amended the Clean Water Act (CWA) in 1987 requiring the EPA to establish a phased schedule for the submittal of National Pollutant Discharge Elimination System (NPDES) permits. The NPDES permit provides a mechanism by which the EPA can implement programs and practices to control polluted storm water runoff.

Applicable Regulations

Storm water rules promulgated under the 1987 CWA Amendments are found in Title 40 Code of Federal Regulations (CFR) Parts 122-124. These rules establish an application process for obtaining NPDES storm water discharge permits and categorizes storm water discharges as either "Phase I" or "Phase II."

Phase I storm water discharges are those having the greatest potential to contaminate runoff and include industrial sectors such as transportation, certain wastewater treatment facilities, hazardous waste treatment/storage/disposal areas, large municipal separate storm sewer systems (MS4s), and construction sites over 5 acres. Under EPA's storm water regulations and general permits applying to Phase I discharges, Air Force installations have several industrial categories/processes that may require permitting including aircraft, plating, transportation, and solid/liquid waste stream management systems and activities.

In December 1999, EPA promulgated the second phase of the storm water regulations (Phase II) with the intent of capturing all of the storm water polluting sources that were not already regulated under Phase I including runoff from housing and large parking areas, construction sites between 1 and 5 acres, and MS4s serving less than 100,000. Provisions of the final rule include "various exemptions" that allow certain sources to be excluded from the NPDES program if discharges

do not cause, or have potential to cause, water quality impairment, as well as sources not normally regulated based on their localized impact on water quality. Finally, EPA is conditionally excluding those industrial facilities whose activities pose "no exposure" to storm water.

The EPA hopes the Phase II rule will be cost-effective, bring about increased utilization of general permits, a greater variety in watershed protection approaches, and an increase in the use of available methods for public participation. Sources that fall under the provisions of Phase II are required to apply for a permit by March 10, 2003, unless otherwise specified by the permitting authority.

Executive Order 12088, "Federal Compliance with Pollution Control Standards," 13 October 1978, requires the Air Force to take all necessary actions to prevent, control, and abate environmental pollution at all installations and to comply with applicable federal environmental regulations.

Air Force Policy Directive (AFPD) 32-70, "Environmental Quality," 20 July 1994, states "The Air Force will prevent future pollution by reducing use of hazardous materials and releases of pollutants into the environment to as near zero as feasible." AFPD 32-70 also directs that any waste which cannot be reused or recycled will be disposed of in an environmentally safe manner consistent with the requirements of all applicable laws.

AFI 32-7041, "Water Quality Compliance," 13 May 1994, implements the water quality requirements of AFPD 32-70. It applies to generating, collecting, treating, reusing, and discarding: domestic and industrial wastewater, storm water, non-point source runoff, sewage sludge, and water treatment residuals. The AFI states that the CWA and EPA regulations form the basis of the Water Quality Compliance Program. To this end, the AFI explains how to assess, attain, and sustain compliance with: CWA; other applicable environmental regulations; and related



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Department of Defense (DoD) and Air Force directives. (NOTE: Water quality requirements at installations outside the U.S. and its territories are addressed in AFI 32-7006, "Environmental Program in Foreign Countries," Chapter 4 of DoD's "Overseas Environmental Baseline Guidance Document", and in country-specific Final Governing Standards).

Air Force Activities

Air Force installations have several processes and activities that may require permitting under the CWA. At a typical Air Force base, these activities include:

- √ Aircraft/vehicle/equipment maintenance, fueling, and washing;
- √ Corrosion control operations;
- √ Maintenance of equipment in support of bulk aviation and motor vehicle fuel storage;
- √ Warehousing operations, if the stored material has the potential to contaminate storm water;
- √ Hazardous material storage;
- √ Roads and grounds maintenance; and
- √ Entomology operations.

Prevention of Storm Water Pollution

There are many approaches to the prevention and control of storm water pollution, ranging from simple measures taken on an individual basis, to larger scale plans instituted installation-wide.

Individual Efforts

Individual efforts may appear simple or minor; however, when employed universally across an installation, they can have a significant impact on the prevention of storm water pollution. These efforts include the proper disposal of waste,

clearing of debris and wastes from storm drains, reducing the use of chemical pesticides and fertilizers for landscaping, and planting or paving areas prone to erosion to reduce the transport of sediment by storm water runoff.

Pollution Prevention Plans

Storm water pollution can also be prevented through the implementation of an installation-wide Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a self-implementing plan for compliance with the NPDES permit. The goal of the SWPPP is to reduce or eliminate potential sources of pollution from coming into contact with storm water runoff. The key elements of the SWPPP are to identify/evaluate potential sources of storm water pollution and their impact; manage sources of potential storm water pollution through the use of Best Management Practices; implement procedures to ensure that pollution prevention and control procedures are effective and current; and provide pollution prevention training to employees.

Additional Information

Contact PROACT at DSN 240-4214 or by email at pro-act@brooks.af.mil, or visit the following websites:

1. EPA's Office of Water NPDES program: <http://cfpub.epa.gov/npdes/>
2. AFI 32-7041, Water Quality Compliance: <http://www.e-publishing.af.mil/pubfiles/af/32/afi32-7041/afi32-7041.pdf>
3. DoD's Implementation Guidance for Storm Water Phase II Regulations: <https://www.denix.osd.mil/denix/DOD/Working/CWASSC/Subjects/Storm/stormwatermenu.html>

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